(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
3 February 2011 (03.02.2011)

PCT

(10) International Publication Number
WO 2011/014890 A1

(51) International Patent Classification:
A61K 38/36 (2006.01)

(21) International Application Number:
PCT/US2010/044177

(22) International Filing Date:
2 August 2010 (02.08.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/230,551 31 July 2009 (31.07.2009) US

(71) Applicant *(for all designated States except US)*: **BAYER HEALTHCARE LLC** [US/US]; 555 White Plains Road, Tarrytown, New York 10591 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **BROOKS, Alan** [GB/US]; 8018 Kelok Way, Clayton, California 94517 (US). **PATEL, Chandra** [US/US]; 540 Trinidad Lane, Foster City, California 94404 (US). **JIANG, Xiaoqiao** [US/US]; 4525 Shellflower Court, Concord, California 94518 (US). **GRITZAN, Uwe** [DE/DE]; D- (DE). **APELER, Heiner** [DE/DE]; Neuer Triebel 71, 42111 Wuppertal (DE). **WANG, Jun** [US/US]; 1828 Ivanhoe Avenue, Lafeyette, California 94549 (US).

(74) Agents: **SANTOS, Fernando** et al.; 800 Dwight Way, Berkeley, California 94710 (US).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

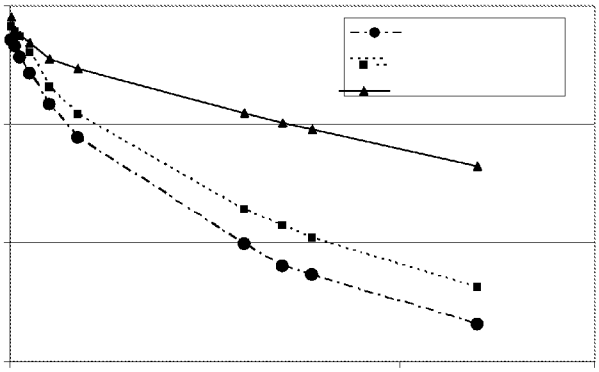
— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

[Continued on next page]

(54) Title: MODIFIED FACTOR IX POLYPEPTIDES AND USES THEREOF

Figure 1



(57) Abstract: The invention relates to modified Factor IX polypeptides such as Factor IX polypeptides with one or more amino acid substitutions. The invention also relates to methods of making modified Factor IX polypeptides, and methods of using modified Factor IX polypeptides, for example, to treat patients afflicted with hemophilia B.

WO 2011/014890 A1

Published:

— *with international search report (Art. 21(3))*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

— *with sequence listing part of description (Rule 5.2(a))*